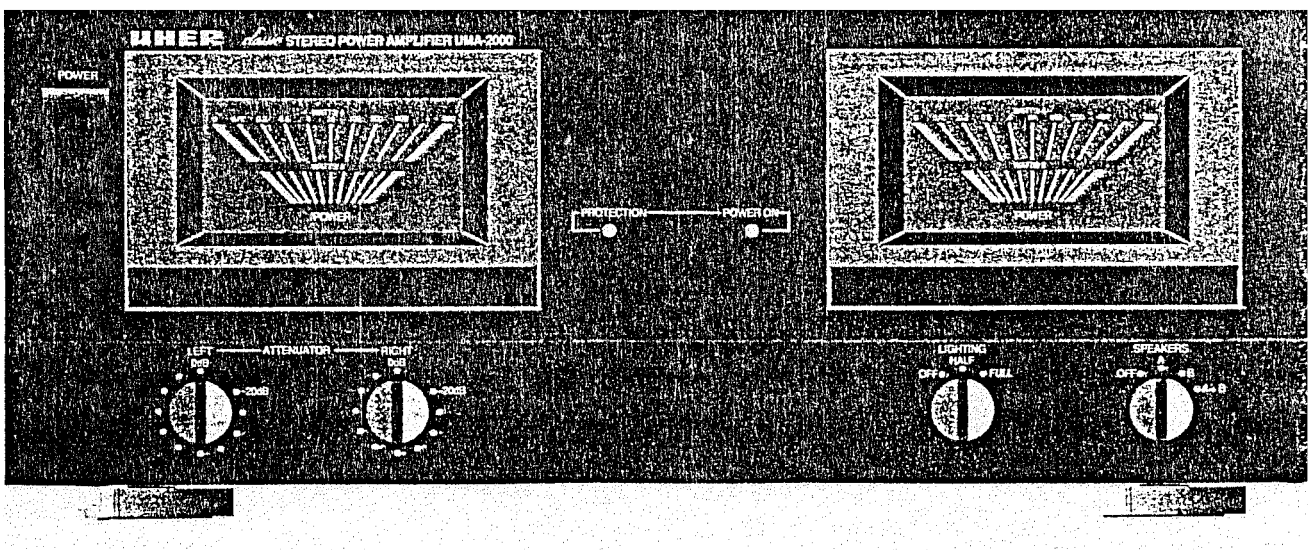
SERVICE MANUAL

UMA-2000
STEREO MAIN AMPLIFIER



SPECIFICATION

Amplifier section

Contionus average power output is 200 watts per channel mini at 8 ohms from 20Hz with no more than 0.03% total harmonic distortion.

Output Power (both channels driven)
Rated (20Hz - 20KHz)
80hms, T.H.D. 0.03% IHF 200W
40hms, T.H.D. 0.1% DIN 320W
Mono/Bridge mode(1KHz)
80hms, T.H.D. 0.1% DIN 630W
40hms, T.H.D. 0.1% DIN 680W
Pulsed output power
80hms 265W
40hms 440W
Total harmonic distortion
80hms, 20Hz - 20KHz,200W 0.03%
Input(Sensitivity/impedance) 1V/50Kohms
Frequency response
3Hz - 120KHz ..... +0/-3dB
S/N rated (short circuit, A network)
at rated output 110dB
at 50mw 85dB

Miscellaneous

Power Reuirements ..... AC 230V,50Hz
Power consumption 1035W
Dimension(W× H× D,without footing)
..... 435× 160× 410mm
Weight 21.5Kgs

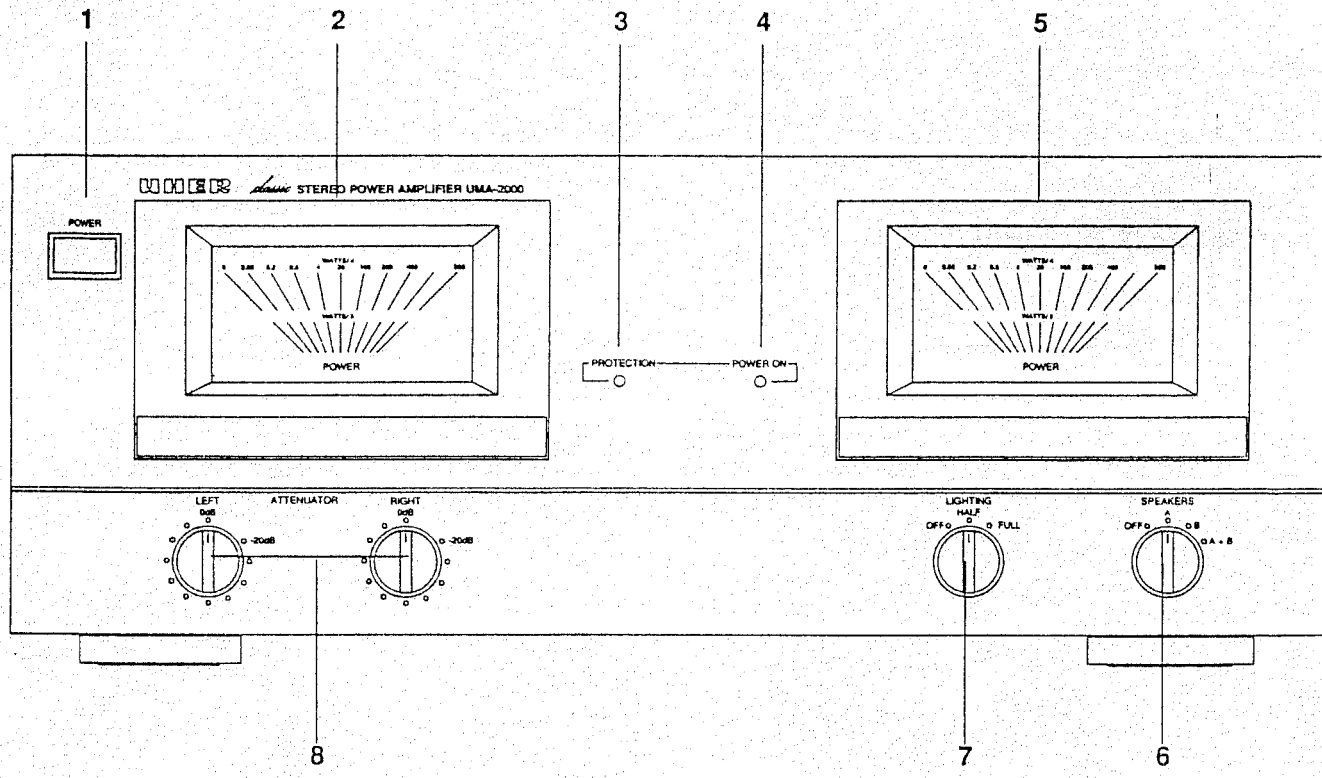
Furnished Parts

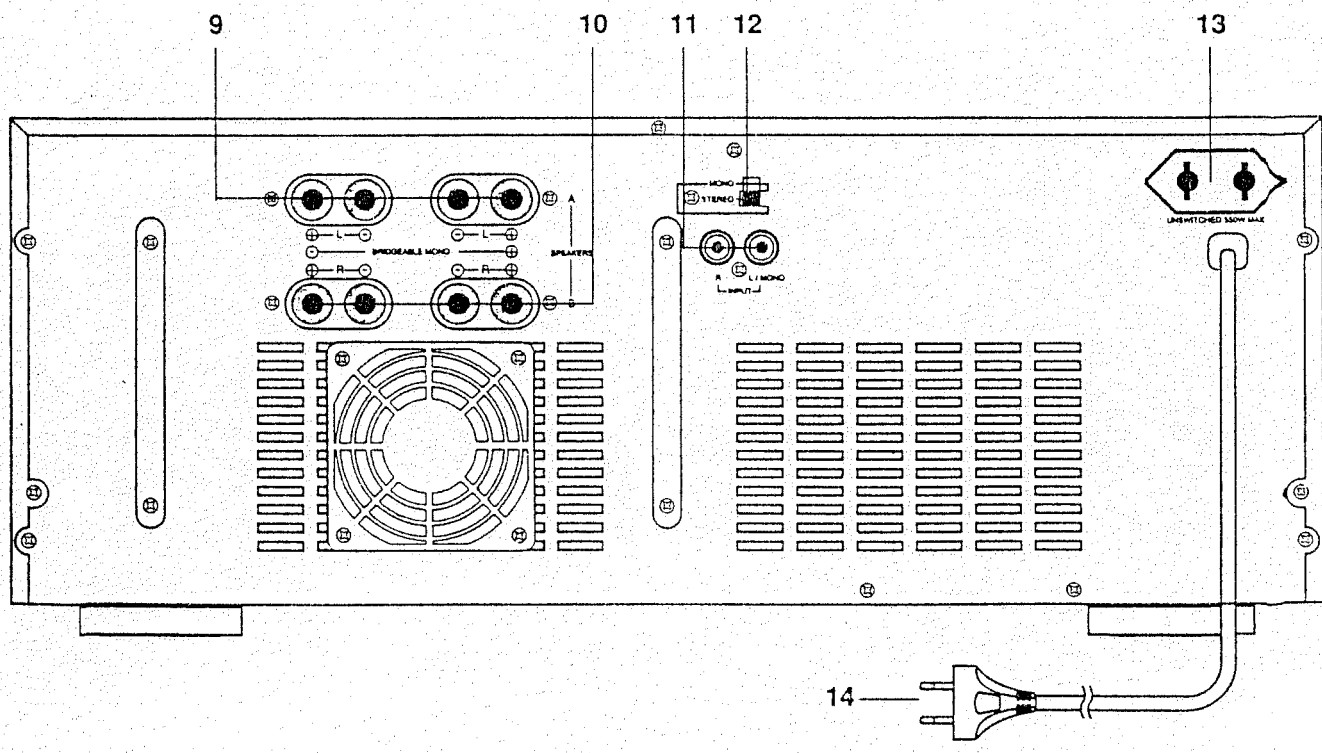
Operation instructions 1
Pin-Plug cord 1

NOTE :

Specifications and design subject to possible modification without notice due to improvements.

PANEL FEATURES





ELECTRICAL PARTS LIST

NOTE : When ordering parts first convert parts number into code form as shown in the following examples.

○ PARTS Numbering

1 1 1 4 4 7 2 2 5

- 5 — Lead Type
- 22 — Tolerance Resistance or Capacitance
- 472 — Nominal Resistance or Capacitance
- 4 — Power Ratings Resistor or Rated Voltage
- 111 — Type of Parts

○ **RESISTOR**

ex) Power Ratings Resistors

8 ••• 1/8W　　4 ••• 1/4W　　5 ••• 1/2W

1 ••• 1/W　　2 ••• 2W　　7 ••• 4W

ex) Resistor Value

479 ••• 4.7Ω　560 ••• 56Ω　681 ••• 680Ω

822 ••• 8.2Ω　123 ••• 12KΩ　224 ••• 220KΩ

*CARBON film Resistor : 111 437225(3.7KΩ, 1/4W)

○ **CAPACITANCE**

ex) Rated Voltage

3 ••• 16V　　4 ••• 25V　　5 ••• 35V

3 ••• 50V　　7 ••• 63V　　1 ••• 6.3V

ex) Type of Ceramic Capacitor

71 ••• CKDYB　75 ••• CKDYE　80 ••• CCDCH

88 ••• CKDSL　84 ••• CKDYE　86 ••• CCDTH

ex) Capacitor Value

040 ••• 4pF　470 ••• 47pF　221 ••• 220pF

182 ••• 1800pF　103 ••• 0.01pF　473 ••• 0.047pF

ex) Tolerance Capacitance

0 ••• C = ±0.25pF　1 ••• D = ±0.5pF　2 ••• F = ±1.pF

0 ••• C = ±20%　4 ••• J = ±5%　5 ••• K = ±10%

9 ••• Z = +80% −20%　6 ••• M = ±20%

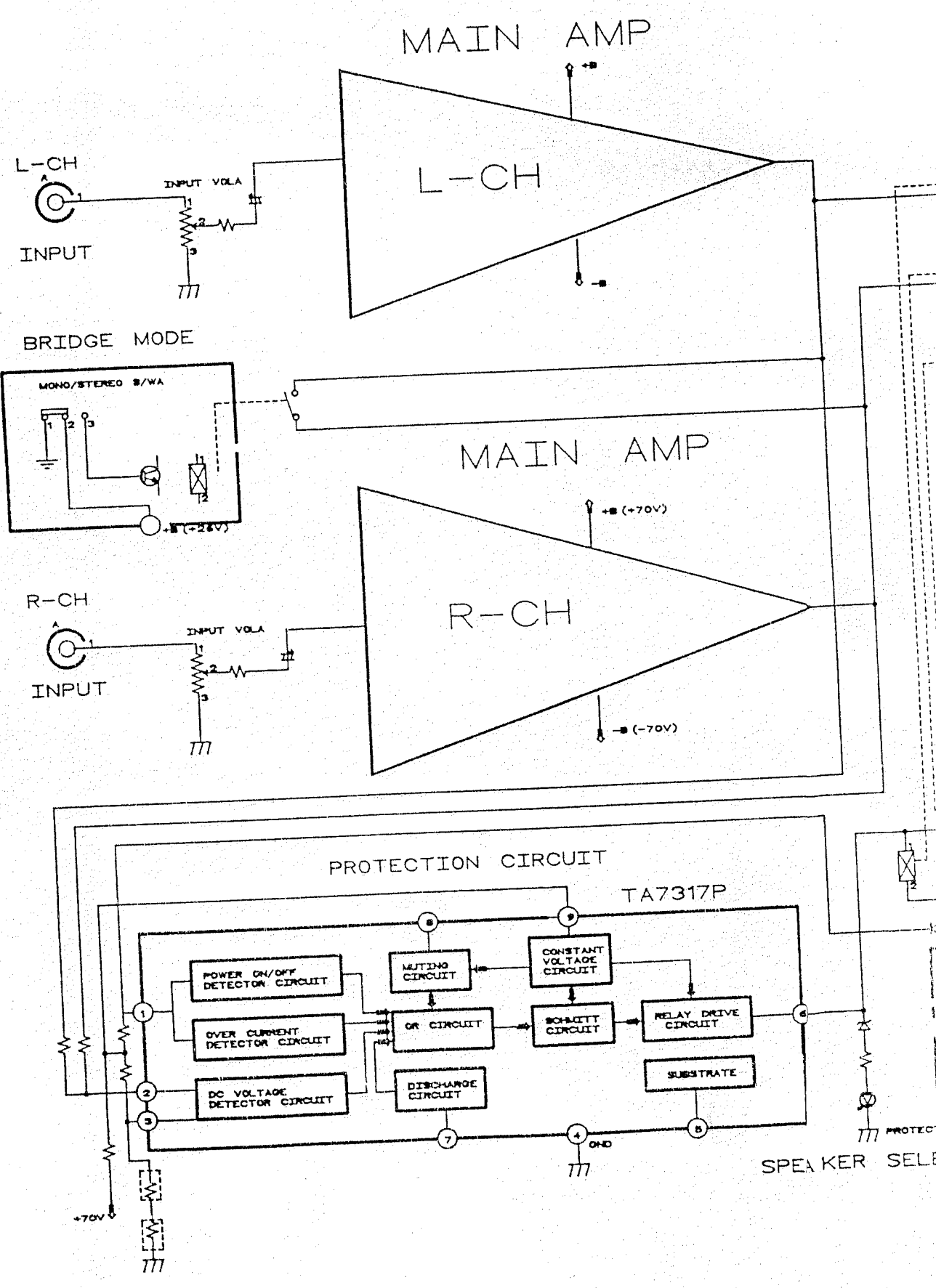
*ELECTROLYTIC CAP : 1[4][4]647365 (0.047 μF, 50V, ±20 %)

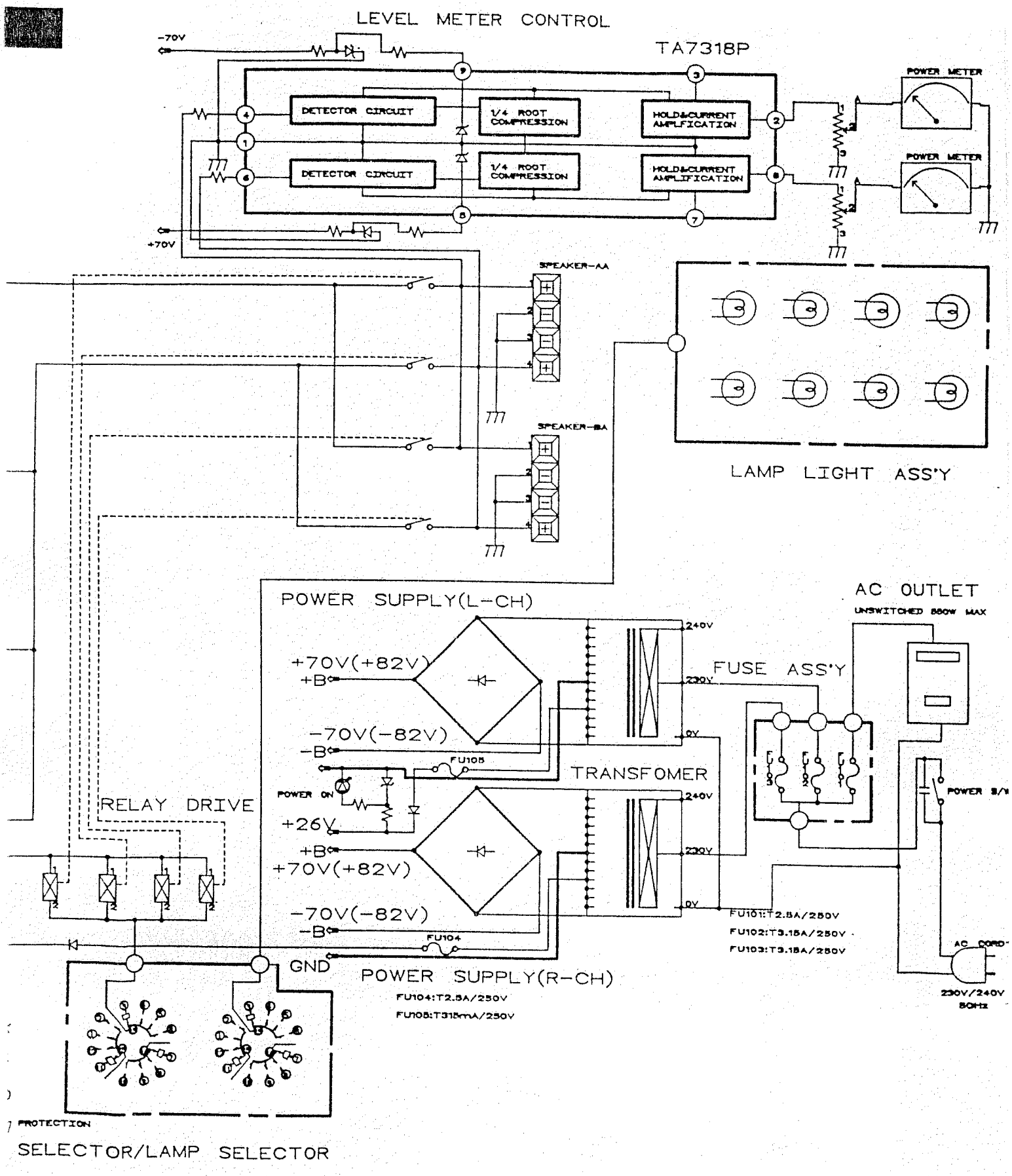
*CERAMIC　　CAP : 1[8][8]647241 (4700pF, 50V, ±20 %)

*MYLAR　　CAP : 1[5][0]647251 (4700pF, 50V, ±10 %)

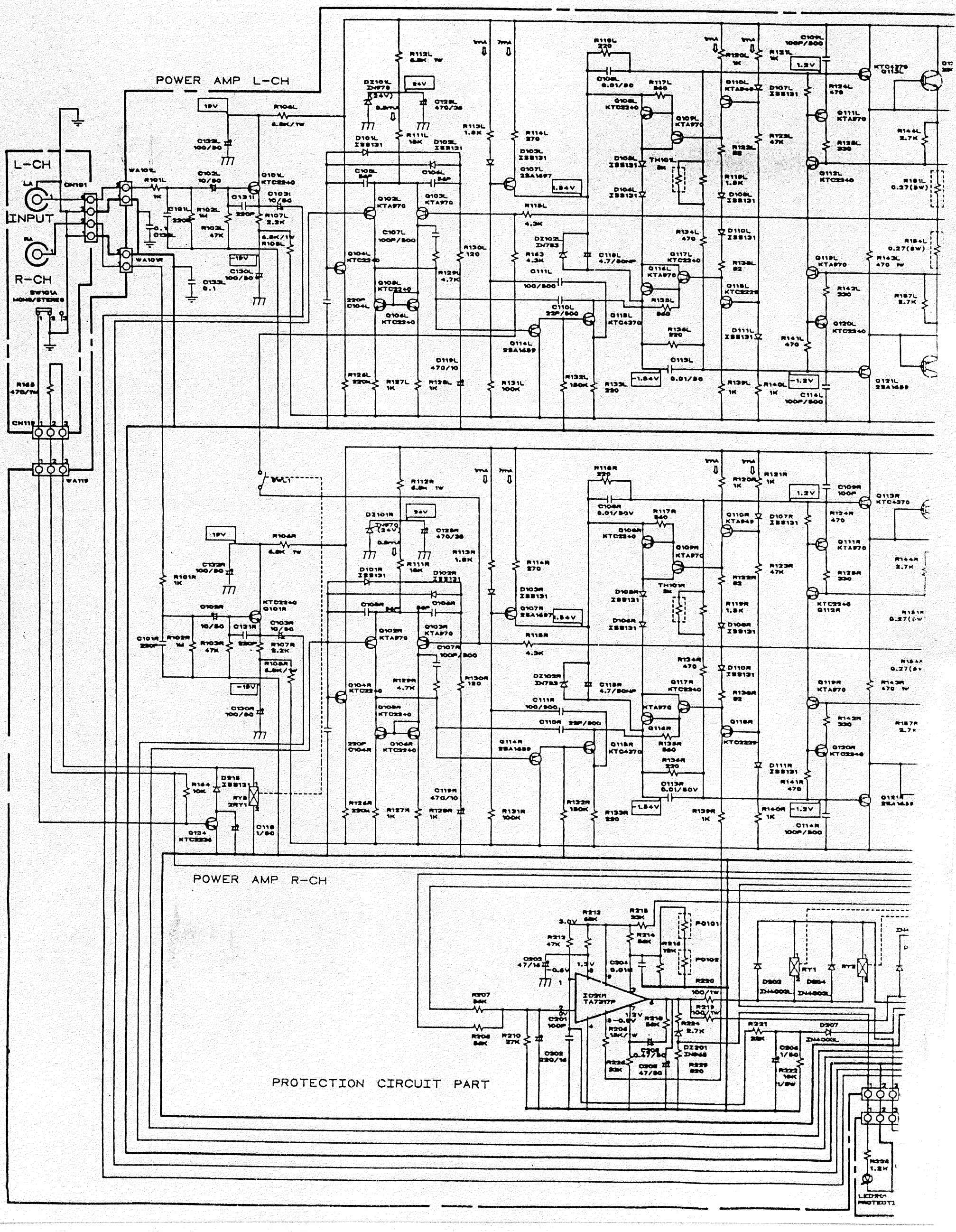
*STYROL　　CAP : 1[5][3]647241 (430pF, 50V, ±5 %)

BLOCK DIAGRAM




LEVEL METER CONTROL
TA7318P
-70V
+70V
DETECTOR CIRCUIT
DETECTOR CIRCUIT
1/4 ROOT COMPRESSION
1/4 ROOT COMPRESSION
HOLD&CURRENT AMPLIFICATION
HOLD&CURRENT AMPLIFICATION
POWER METER
POWER METER
SPEAKER-AA
SPEAKER-BA
LAMP LIGHT ASS'Y
POWER SUPPLY(L-CH)
+70V(+82V)
+B
-70V(-82V)
-B
FU105
POWER ON
+26V
+B
+70V(+82V)
-70V(-82V)
-B
FU104
GND
POWER SUPPLY(R-CH)
FU104:T2.5A/250V
FU105:T315mA/250V
TRANSFOMER
240V
230V
0V
240V
230V
0V
FUSE ASS'Y
AC OUTLET
UNSWITCHED 880W MAX
POWER S/W
AC CORD
230V/240V
50Hz
FU101:T2.5A/250V
FU102:T3.15A/250V
FU103:T3.15A/250V
RELAY DRIVE
PROTECTION
SELECTOR/LAMP SELECTOR

SCHEMATIC DIAGRAM



1.RESISTORS

Indicated in KΩ, MΩ: 1/4W,1/8W,±5% TOLERANCE unless otherwise noted. (F)±1%,(G)±2%,(J)±5%,(K)±10%,(M)±20% TOLERANCE.

2.CAPACITORS

Indicated in capacity (uF)/voltage(V) unless otherwise noted. pF: Indicated without voltage is 50V except electrolytic capacitor.

3.VOLTAGE / CURRENT

( ) DC voltage (V) at no input signal. Value in ( ) is DC voltage at rated power.

⇨ : DC current at input signal.

4.OTHERS

The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing,be sure to use parts of indicated designation.

LEVEL METER PART

POWER METER

LAMP ASS'Y

SPEAKER A

SPEAKER B

POWER SUPPLY PART

FUSE PART

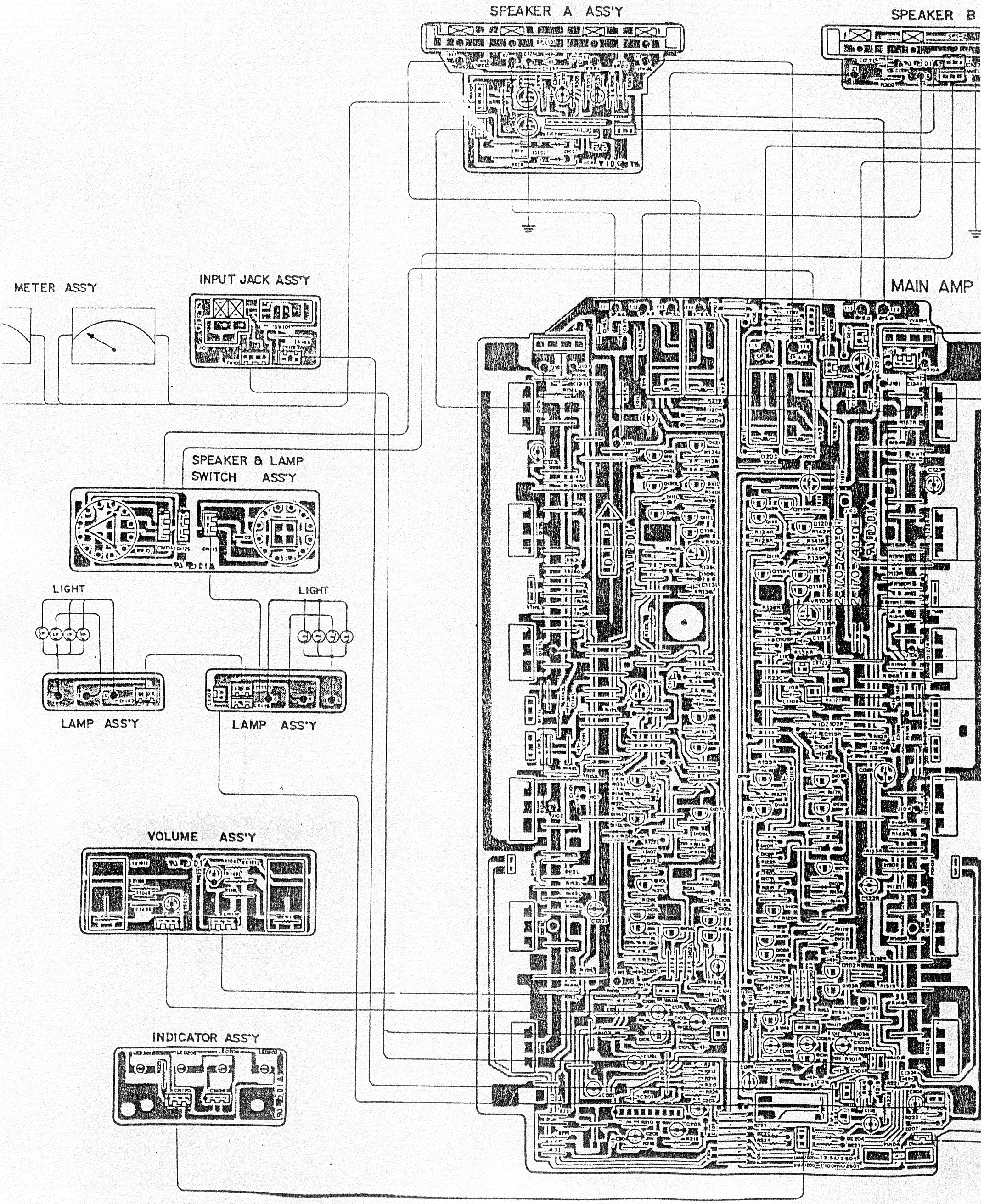
AC OUTLET

POWER SWITCH

FAN MOTOR

THERMOSTAT

WIRING DIAGRAM



SPEAKER B ASS'Y

MAIN AMP ASS'Y

T102 ⚠

BLUE

BLUE

RED

GREEN

RED

BLUE

BLACK

0V

RED

230V

240V

POWER SUPPLY ASS'Y ⚠

FU105
T315mA/250V

FAN MOTOR

M

THERMOSTAT

T101 ⚠

RED

GREEN

RED

YELLOW

YELLOW

BLUE

BLACK

0V

RED

230V

240V

T2.5A/250V AC OUTLET ⚠

FU101

FU102

2.5A/250V ⚠

FU103

2-170-824-01
A-170-824-01

⚠ UNSWIT
550W

⚠ AC POWER COR

AC 230V 50Hz

POWER
SW ASS'Y